

# Projection of Own on Others' Job Characteristics: Evidence for the False Consensus Effect in Job Characteristics Information

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The present study is an examination of the influence of rater characteristics as a source of bias in job characteristics information, as gleaned from the Job Diagnostic Survey (JDS). Participants ( $N = 133$ ) completed an initial JDS for own job characteristics. Non-incumbents ( $n = 104$ ) then completed a secondary JDS in order to rate incumbents' job characteristics. Non-incumbents' personality dimensions, own job characteristics, job satisfaction level, and incumbent satisfaction level were hypothesized as predictors of ratings of job characteristics of incumbents. Results indicate that two characteristics, job autonomy and dealing with others, were influenced by non-incumbents standing on these characteristics, and demonstrated evidence of the false consensus effect. Limitations and implications for interpreting job information are discussed.

Most instruments developed to assess job characteristics are in survey form and are completed by job incumbents (Hackman & Oldham, 1975; Schmitt & Cohen, 1989; Van Veldhoven, De Jonge, Kompier, Broersen, & Meijman, 2002; Xie & Johns, 1995). The reliability and validity of self-report job ratings are likely to be threatened by non-random, systematic sources of error. In order to establish the construct-related convergent validity, observer ratings of job characteristics have been combined with job information provided by incumbents. As Thomas and Griffin (1983) noted, the framework of job characteristics suggests that: (1) jobs can be characterized by a number of objective attributes such as variety, autonomy, feedback, identity, and significance; (2) employees perceive and react to these attributes; and (3) affect, motivation, and perhaps performance are positively correlated with the presence of these objective attributes (p. 672). Thus, perceptions of objective work characteristics are important for motivation and performance of employees.

Sources of bias in information from incumbents have been the subject of previous research (Caldwell & O'Reilly, 1982; James & Tetrick, 1986; Spector, 1992; Taber &

Taylor, 1990). However, both systematic and non-systematic sources of bias may influence *non-incumbents* as well (Hunter, 1986). The objective of the present study is to examine one prominent potential source of systematic bias, the false consensus effect (FCE), which is the tendency of raters to overestimate the commonness of their own (job) characteristics and position. More specifically, we will investigate the influence of raters' own job characteristics, personality, and job satisfaction on their ratings of incumbent job characteristics using the Job Diagnostic Survey (JDS). Identifying the conditions influencing rater-incumbent agreement on evaluations of job characteristics should provide an insight into the value of different sources and use of job information (Sanchez, Zamora, & Viswesvaran, 1997).

## The Job Characteristics Model (JCM)

The JCM (Hackman & Oldham, 1976, 1980) has been the subject of numerable studies. Based on the expectancy theory of motivation, the JCM examines individual responses to jobs (e.g. job satisfaction, sickness absenteeism, personnel turnover) as a function of job characteristics moderated by individual characteristics (Roberts & Glick, 1981). Hackman and Lawler (1971) define the core job

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characteristics as: skill variety (breadth of skills used at work), task significance (impact that the work has on the lives or work of others), task identity (opportunity to complete an entire piece of work), feedback (amount of information provided about effectiveness of job performance), and autonomy (degree to which the job provides substantial freedom, independence, and discretion in determining goal-directed behavior at work). Two supplementary dimensions that Hackman and Oldham (1975) found to be relevant are feedback from agents (degree to which the employee receives clear information about performance from supervisors) and dealing with others (the degree to which the job requires an employee to work closely with other people in carrying out work activities).

The job characteristics proposed by Hackman and Lawler (1971) correlate significantly with important employee outcomes. Meta-analyses have demonstrated that the presence of certain job characteristics, in particular, job autonomy, leads to positive employee attitudinal outcomes (Fried & Ferris, 1987; Parker & Wall, 1998). In turn, job autonomy enhances well-being (Warr, 1999), affective organizational commitment (Meyer & Allen, 1997), and role breadth self-efficacy (Parker, 1998). Further, Spector and Jex (1991) found that each job characteristic correlated significantly and positively with job satisfaction, and all but task significance and task variety correlated significantly and negatively with frustration and anxiety. In addition, autonomy, task significance, and feedback correlated significantly and negatively with turnover intentions.

## Job Characteristics and Intrinsic Motivation

Job characteristics influence intrinsic work motivation through the attainment of critical psychological states (CPSs; Hackman & Lawler, 1971; Hackman & Oldham, 1976, 1980). Renn and Vandenberg (1995) hypothesized that internal motivation results from work that prompts the three CPSs; experienced meaningfulness, experienced responsibility, and knowledge of results. Experienced meaningfulness refers to the extent to which an individual believes his or her job is important based on the individual's value system. Experienced responsibility represents the degree of personal accountability an individual has for his or her own work outcomes. Knowledge of results refers to the extent to which individuals know how well they are performing their job. Work consisting of the job characteristics from the JCM brings about the three CPSs, and greater amounts of these job characteristics lead to stronger experiences of the CPS. Stronger experiences of the CPS, in turn, should lead to increased job satisfaction and increased performance (Renn & Vandenberg, 1995).

## The JDS

Hackman and Oldham based their JDS (1975) on the JCM. Although the subject of a few studies regarding possible biases in the late 1970s and early 1980s (Arvey, Davis, McGowen, & Dipboye, 1982; Ferratt, Dunham, & Pierce, 1981; Pierce & Dunham, 1978), the JDS has not received much attention in the last decade. The development of the JDS stemmed from a lack of instruments capable of measuring and understanding results of job redesign as a strategy for organizational change in order to combat problems in productivity and alienation across many job categories (Hackman & Oldham, 1975). In theory, responses on the JDS reflect incumbent task perceptions as indirect measures of task characteristics (Roberts & Glick, 1981). Indicative of the validity of the JDS in measuring job characteristics of incumbents are the correlations between incumbent and non-incumbent ratings. Median correlations of .51 (supervisor–job incumbents), .63 (incumbents–non-expert observers), and .46 (supervisors–non-expert observers) have been reported. Furthermore, reliability estimates are typically above .70 (Pierce & Dunham, 1978). All job dimensions on the JDS have reasonable internal consistency, with coefficient  $\alpha$ 's ranging from .59 (task identity) to .78 (feedback from agents) (Hackman & Oldham, 1976). Incumbent scores on the JDS have indicated responsiveness to manipulations of job characteristics in both field and laboratory studies (Spector, 1992; Taber & Taylor, 1990), and its utility in job design research has been clearly demonstrated (Pierce & Dunham, 1976).

## Sources of Bias in Self-Report Ratings

As previously stated, most job characteristics information is from self-report. However, the use of job incumbents as sources of information may be questionable, as it is not clear to what extent perceptions reflect correlations with objective job conditions (Spector & Fox, 2003). Spector (1992) proposed that some factors causing bias in self-reports are social cues from others, individuals' personalities, cognitive processes, moods, and attitudes.

## The FCE

The FCE is the tendency to perceive others' personality characteristics, attitudes, and behaviors as "similar to me", and ascribe one's own standing on those areas to others (Alicke & Lango, 1995; Biernat, Manis, & Kobrynowicz, 1997). This phenomenon, also termed *pluralistic ignorance*, demonstrates the tendency to use oneself as an anchor when making judgments regarding others. False consensus has been examined regarding the prevalence of attitudes with respect to many topics, including perceptions of body shape and size (Muller, Williamson, & Martin, 2002) as

well as drug and alcohol usage (Wolfson, 2000). Possible explanations for FCE are: a recency effect (i.e. the tendency to remember information that is most recently processed); selective exposure (i.e. the tendency to associate with those most similar to me in order to validate one's preferences and beliefs) (Alicke & Largo, 1995; Goethals, Allison, & Frost, 1979); internal focus of attention (i.e. an overestimation of consensus because of a focus on one's own opinion and preferences) (Marks & Miller, 1987); and situational attribution (i.e. the viewing of behavior as conditioned by situational forces and the assumption that others respond in a similar fashion) (Alicke & Largo, 1995; Gilovich, Jennings, & Jennings, 1983). An examination of the FCE in job information has yet to occur.

False consensus is relatively stable and occurs across domains. In one study by Dunning and Hayes (1996), 71% of participants reported comparing a target's behavior with their own. Projection occurs despite instructions not to be biased (Krueger & Clement, 1994) and receiving feedback on the accuracy of predictions (Krueger & Clement, 1994). Furthermore, projection was not affected by information about the other person (Alicke & Largo, 1995; Clement & Krueger, 2000), or when linked with no obvious benefits to the self-esteem of the rater (Alicke & Largo, 1995). Biernat *et al.* (1997) have claimed that although there is no clear resolution regarding the mediating mechanisms underlying false consensus, the pattern is reliable, and an effect size of .31 has been found in the domains of behaviors, traits, preferences, beliefs, and personal problems. Although the strength of projection varies, no particular personal characteristic or type of judgment is immune to projection (Clement & Krueger, 2002).

## Potential Variables Contributing to the FCE

### *Personality Dimensions*

Past research has examined the moderating effect of personality on job outcomes (see Barrick & Mount, 1991, for a review). The factor structure of the Big Five personality dimensions (agreeableness, conscientiousness, extraversion, emotional stability, and openness to experience) has been replicated in numerous studies (Goldberg, 1993; McCrae & Costa, 1997). Recent studies have suggested that certain Big Five factors relate to workplace attitudes and behavior, as well as job satisfaction and job characteristic ratings (Judge, Heller, & Mount, 2002). Further, openness to experience accounts for the relationship between growth need strength and job satisfaction (De Jong, Van der Velde, & Jansen, 2001). With regard to job characteristics information, there is evidence that the relation between both conscientiousness and extraversion to performance is dependent on the influence of autonomy (Barrick & Mount, 1993).

Personality as a source of bias in incumbents' job characteristic ratings is a logical concern because most job

characteristics ratings are from self-report measures. Positively disposed individuals tend to rate characteristics of the task or the job as more enriched than do less positively disposed individuals (Judge *et al.*, 2002). These individuals may see their jobs as more challenging because they are predisposed to perceive these aspects as positive; therefore, there is a necessity to differentiate perceptions of jobs based on self-concept from the actual job tasks (Judge, Bono, & Locke, 2000). Negative affectivity (or the tendency to experience job dissatisfaction as well as to report negative emotions across situations such as job conditions and characteristics) has also been the subject of study (Watson & Clark, 1984; Spector, Fox, & Van Katwyk, 1999). However, Spector *et al.* (1999) did not find support for relationships between negative affectivity and biased self-reports of job characteristics by incumbents.

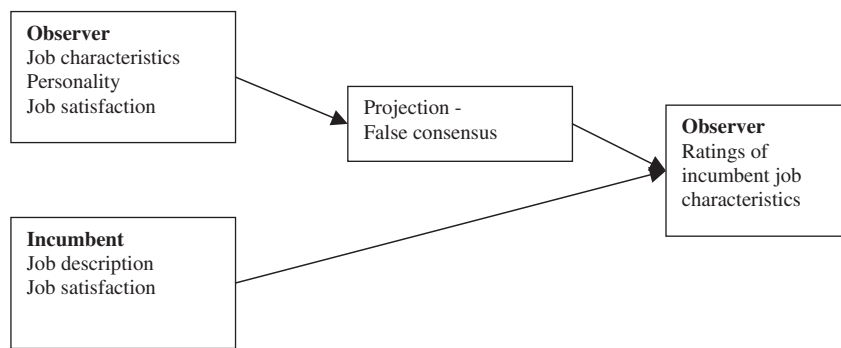
### *Situational Variables*

Situational variables within the organization can affect incumbents' perceptions of their jobs. Incumbents encounter demands such as workload, role problems, lack of job control, participation in decision making, and lack of task variety, as well as a lack of resources in the form of support from colleagues, peers, and family (see Demerouti, Bakker, Nachreiner, & Schaufeli, 2001 for an overview). High demands along with a limited amount of job resources undermine motivation, which leads to feelings of reduced personal accomplishment (Demerouti *et al.*, 2001). Unique factors affect each job incumbent and he or she may perceive aspects of the job that are not obvious to observers (Sanchez *et al.*, 1997). Each of these situational variables may affect incumbents' ratings of their own job characteristics.

Situational variables may also influence non-incumbents. Patterns of correlations between job demands, resources, and affective reactions differ only slightly for ratings provided by incumbents and non-incumbents (Demerouti *et al.*, 2001). Observers who are supervisors, peers, or even non-affiliated raters may experience a lack of social support, role clarity, and time pressure in their own occupations. Lack of training, time constraints, as well as inadequate information about an incumbent's job can make ratings of certain job characteristics less accurate than the incumbent's self-ratings (Spector & Fox, 2003).

### *Job Satisfaction*

Research has found support for the influence of job satisfaction on incumbents' perceptions of job characteristics (Caldwell & O'Reilly, 1982); however, *raters'* knowledge of incumbent satisfaction also biases evaluations. Knowledge of incumbent satisfaction affects rater attention to incumbent-specific behaviors (DeNisi, Cafferty, & Meglino, 1984) and distorts observers' recall of job



**Figure 1. Proposed design of study hypotheses.**

relevant information (Smither, Collins, & Buda, 1989). Observers, in particular extra-organizational observers, also lack vocational commitment to the job under analysis (Sanchez *et al.*, 1997). Therefore, observer ratings of incumbent job characteristics (ORICs) may reflect an ignorance of aspects that are particular to that incumbent's organization, and may thus be a reflection of inferred job satisfaction of the incumbent.

In addition, observers' own job satisfaction may be cause for projection. As previously stated, observers may experience a lack of social support, role clarity, and time pressure in their own occupations, which can affect their own reported job satisfaction. In addition, observers' perceptions of their own job characteristics are related to their job satisfaction. Thus, it is reasonable to assume that observers' own job satisfaction may influence their ORICs.

### *Variables of Interest and Hypotheses of the Present Study*

From previous studies, it is evident that certain variables can influence the relationship between observers' ratings of their own job characteristics and the ratings observers assign to job incumbents. Of particular interest is the influence of *rater* characteristics as a source of bias.

Classic theory predicts that "supervisor perceptions . . . [will] be influenced by idiosyncratic factors such as the match or mismatch between the personality of the worker and the personality of the supervisor" (Hunter, 1986, p. 350). It is our theory that observer personality will serve as a source of bias in ORIC. The present study examined the influence of rater personality on ratings of the job characteristics of incumbents. We hypothesized the following:

*Hypothesis 1:* Observers' personality dimensions will significantly and positively predict each ORIC.

Non-incumbent measures are not free from bias (Frese & Zapf, 1988). Job characteristics ratings reflect not only objective but also socially construed realities. The demands and resources present in an observer's job situation may

bias his or her judgment of an incumbent's job characteristics. This led us to the following hypothesis:

*Hypothesis 2:* Observers' ratings of their own job characteristics will significantly and positively predict ORICs.

Because of the potentially biasing influence of incumbent satisfaction on own ratings of job characteristics, incumbents' satisfaction levels, and observers' satisfaction levels in their own jobs, we hypothesized:

*Hypothesis 3:* Both observers' and incumbents' own job satisfaction will significantly and positively predict ORICs.

Combination of sources of information has not improved the objectivity of job information. This may be because of a decrease in the accuracy of sources other than incumbents (Frese & Zapf, 1988; Semmer, Zapf, & Greif, 1996; Spector & Fox, 2003). If the false consensus is a relatively stable phenomenon and if any type of judgment can demonstrate the phenomenon, job characteristic ratings may also be vulnerable to the influence of false consensus (see Figure 1).

## Method

### *Participants*

The sample for this study consisted of 134 participants enrolled in two personnel psychology courses at the University of Utrecht, the Netherlands, all of whom held a paid job in addition to their studies. We deleted one incumbent's information from subsequent analysis because of incomplete responses; thus, 133 responses were included in the analysis. The majority of participants were females (83%) and the modal age category was 20–30 years. Ninety percent indicated less than 5 years of job tenure and 88% indicated less than 5 years of organizational tenure. Participants' current jobs were classified into one of three categories; working with people, working with data, or working with things.

### Procedure

All participants completed a questionnaire that included three inventories. The investigators randomly divided participants into groups ( $k = 29$ ). One member for each group volunteered to describe his or her current job to the other group members. This volunteer was referred to as the “storyteller”, i.e. incumbent. Incumbents had 30 min to describe their job to the group.

Raters then had the opportunity to ask questions using the Situation or Tasks encountered, Actions completed, and Results of actions (STAR) technique, a response to behavioral interviewing wherein the respondent provides explicit examples of job tasks. It requires the incumbent or job applicant to focus on their past behaviors in specific situations, as these behaviors should be the most accurate predictor of future behaviors in similar situations (MIT Careers Office, 2003). The STAR technique allows an applicant or incumbent to give a structured response to a behavioral interview question by: (a) stating the Situation, (b) the Task assigned, (c) the Action taken in order to resolve the problem, and (d) the Results of the actions taken. The Action section is of the particular importance, as it references past performance in order to predict future work behaviors.

From this information, observers (raters) completed a second JDS wherein they rated the incumbent (storyteller) on job characteristics from their job description.

### Measures

All participants completed the Dutch translation of the JDS (Jansen & Kooijman, 1987). This 21-item questionnaire targeted six job characteristics (autonomy, task significance, task identity, skill variety, feedback from the job, dealing with others), with one factor (feedback) containing the dual target from within and external to the organization. In addition, dealing with others was included because of its appearance in the original version of the JDS. Three items assessed each characteristic, save feedback, which was composed of six items to account for its two-part component.

Participants also completed a supplementary Dutch translation of Goldberg’s bi-polar rating scale of the Big Five factors (Goldberg, 1992; Van Heck, Perugini, Caprara, & Froeger, 1994; De Jong, Van Eck, & Van den Bos, 1994), which has satisfactory construct and criterion validity (De Jong *et al.*, 1994). Each dimension (extraversion, agreeableness, conscientiousness, emotional stability, and conscientiousness) was assessed by 12 pairs of adjectives, wherein respondents described themselves along extremes of nine-point scales (De Jong *et al.*, 2001). A brief, seven-item questionnaire regarding job satisfaction was also included with the JDS and Goldberg scale. Sample questions included, “I am very satisfied when I am working”, and, “In general, I am satisfied with this type of

work”. Respondents could answer on a seven-point scale ranging from 1 = highly disagree to 7 = highly agree (De Jong *et al.*, 2001).

## Results

### Descriptive Statistics

In order to demonstrate the effect of the raters’ shared experience of the incumbents’ job description, we calculated intraclass correlation coefficients (ICCs) using one-way ANOVAs. ICCs for five of the six job characteristics, task identity (ICC = .72), autonomy (ICC = .73), feedback (ICC = .80), task significance (ICC = .80), and skill variety (ICC = .82), fell above an acceptable ICC value of .60. However, the ICC for dealing with others was  $-.03$ , which is below the acceptable level of agreement. The ICC values indicate that observers were reliable when comparing their judgments on the majority of job characteristics. Because of the relative stability of the other ICCs, ranging from .73 (autonomy) to .82 (skill variety), the ICC for dealing with others ( $-.03$ ) seems to indicate that there are other variables heavily influencing the rating of this particular job characteristic. In addition, we calculated coefficient  $\alpha$  levels for each job characteristic.

Coefficient  $\alpha$ ’s were used to test the reliability of the self-rated job characteristics of all participants ( $N = 133$ ), observers ( $N = 104$ ), and the observer ratings of incumbents ( $N = 104$ ) (see Table 1 for descriptive statistics). The reliability of self-ratings of job characteristics for all participants ranged from .68 (task significance) to .85 (dealing with others). For observer self-ratings, reliabilities were within reasonable range from .67 (self-task significance) to .85 (self-dealing with others).  $\alpha$ ’s for ORICs ranged from .71 (ORIC skill variety) to .83 (ORIC task identity). Finally, personality dimensions were tested for reliability (see Table 1), with dimensions ranging from .66 (openness to experience) to .86 (extraversion).

As can be seen in Table 2, each job characteristic demonstrated a significant correlation between the incumbent self-rating and ORICs, except dealing with others ( $r = .12, p > .05$ ). The strongest correlations were for skill variety ( $r = .58, p < .001$ ) and task identity ( $r = .51, p < .001$ ).

### The FCE

Correlations between observer self-ratings and ORICs ranged from  $r = -.01$  (feedback) to  $r = .83$  (dealing with others) (see Table 3 for all correlations), with dealing with others ( $p < .001$ ) and autonomy ( $r = .29, p < .01$ ) demonstrating significance.

Observer personality as predictive of ORICs was analyzed via simultaneous regression (see Table 4).

There was little overall support for our first hypothesis regarding the predictive ability of observer personality on ORICs. Of the Big Five personality dimensions, observer

**Table 1. Means, standard deviations, reliability (coefficient  $\alpha$  and intraclass coefficients) for job characteristics and personality dimensions**

Job characteristics	Observer ratings of incumbents ( $N = 104$ )				Incumbent self-ratings ( $N = 29$ )			Observer self-ratings ( $N = 104$ )			Sample self-ratings ( $N = 133$ )		
	$M$	SD	$\alpha$	ICC	$M$	SD	$\alpha$	$M$	SD	$\alpha$	$M$	SD	$\alpha$
Dealing with others	4.45	1.31	.81	-.03	5.21	1.75	.91	4.34	1.67	.85	4.53	1.72	.85
Autonomy	5.33	1.09	.78	.73	5.28	.84	.36	5.11	1.12	.71	5.15	1.06	.71
Task significance	4.78	1.35	.75	.80	4.91	1.12	.66	4.44	1.28	.67	4.55	1.26	.68
Task identity	5.05	1.36	.83	.72	5.46	1.03	.70	4.83	1.42	.73	4.97	1.36	.73
Skill variety	4.35	.126	.71	.82	4.60	.99	.55	4.00	1.32	.72	4.13	1.28	.72
Feedback	4.37	1.06	.75	.80	4.86	.95	.82	4.69	1.10	.81	4.72	1.07	.81
Personality dimensions								$M$	SD	$\alpha$			
Agreeableness								7.18	.55	.69			
Extraversion								6.86	.89	.86			
Conscientiousness								6.81	.82	.78			
Emotional stability								5.99	.88	.76			
Openness to experience								6.92	.61	.66			

extraversion predicted the ORIC for dealing with others ( $\beta = .27, p < .05$ ). ORIC task identity was predicted by observer agreeableness ( $\beta = .26, p < .05$ ) and observer conscientiousness ( $\beta = -.24, p < .05$ ), albeit negatively,

indicating that observers high in conscientiousness gave lower ORICs for task identity. Dealing with others and task identity were the only characteristics demonstrating significant influence of observer personality dimensions.

**Table 2. Correlations for incumbent self-ratings and observers' ratings of incumbents ( $N = 104$ )**

Variable	1	2	3	4	5	6	7	8	9	10	11	12
Incumbents' self-ratings												
1. Dealing with others	(.91)											
2. Task significance	-.24*	(.66)										
3. Task identity	-.23*	.13	(.70)									
4. Skill variety	.32***	.12	-.25**	(.55)								
5. Feedback	.02	-.03	-.06	.35***	(.82)							
6. Autonomy	-.08	-.03	-.19	.31***	.21	(.36)						
Observers' ratings of incumbents												
7. Dealing with others	.12	-.01	.13	.12	-.03	-.03	(.81)					
8. Task significance	-.17	.39***	-.06	.13	-.09	.07	-.04	(.75)				
9. Task identity	-.10	.04	.51***	-.02	-.12	-.16	.04	.13	(.83)			
10. Skill variety	.17**	.22*	-.03	.58***	.03	-.03	.13	.23*	.11	(.71)		
11. Feedback	.01	.19	.08	.24*	.40***	-.07	.19	.13	.19	.19	(.75)	
12. Autonomy	-.34**	.34***	-.09	.26**	.06	.26*	.06	.37***	.16	.31**	-.01	(.78)

Note: \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ . Coefficient  $\alpha$  reliability estimates are on the diagonal.

**Table 3. Correlations for observers' self-ratings with ratings of incumbents' job characteristics (N = 104)**

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13
<b>Observer's self-ratings</b>													
1. Dealing with Others	(.85)												
2. Task Significance	-.24*	(.85)											
3. Task Identity	-.23*	.20	(.73)										
4. Skill Variety	.32***	.43***	.15	(.72)									
5. Feedback	.02	.04	.05	.34**	(.81)								
6. Autonomy	-.08	.16	.22*	.43***	.06	(.71)							
<b>Observer' ratings of incumbents</b>													
7. Dealing with others	.83***	.16	-.06	.55***	.28**	.19	(.81)						
8. Task significance	.04	.04	.05	.13	.09	.14	-.04	(.75)					
9. Task identity	.06	.08	.04	.08	.04	-.03	.04	.13	(.83)				
10. Skill variety	.09	.01	-.10	.16	.11	.27**	.13	.23*	.11	(.71)			
11. Feedback	.11	-.13	.04	.11	-.01	.19	.19	.13	.19	.19	(.75)		
12. Autonomy	.29**	.16	-.12	.32**	.25	.29**	.06	.37**	.16	.31**	-.01	(.78)	
13. Rater job satisfaction	.39**	.15	.24*	.52***	.29**	.21*	.33*	-.10	.10	-.16	.25**	.01	(.86)

Note: \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ . Coefficient  $\alpha$  reliability estimates are on the diagonal.

Next, ORICs were regressed hierarchically on observer personality dimensions (step 1), observer self-ratings of job characteristics (step 2), observer self-rated job satisfaction (step 3), and incumbent satisfaction (step 4) (see Table 5 for Model information).

Observers' self-ratings for dealing with others ( $\beta = .82$ ,  $R^2$  change = .65,  $p < .001$ ) and autonomy ( $\beta = .30$ ,  $R^2$  change = .09,  $p < .01$ ) were found to be significant predictors of the ORICs for these characteristics, supporting Hypothesis 2. Observer self-ratings of job characteristics were significant predictors of two of the six ORICs.

Furthermore, observer job satisfaction was a significant predictor of ORIC for feedback ( $\beta = .34$ ,  $R^2$  change = .09,  $p < .01$ ). However, observer job satisfaction negatively predicted ORIC for skill variety ( $\beta = -.27$ ,  $R^2$  change = .05,  $p < .05$ ).

Incumbent job satisfaction significantly predicted feedback ( $\beta = .36$ ,  $R^2$  change = .11,  $p < .001$ ), task significance ( $\beta = .38$ ,  $R^2$  change = .12,  $p < .001$ ), and task identity ( $\beta = .29$ ,  $R^2$  change = .07,  $p < .01$ ).

One possible concern regarding the results is the shared job category of many participants. This sample consisted mostly of participants whose jobs would fall into the category "working with people". Therefore, we calculated partial correlations *post hoc*. When branch of work, i.e. working with data, people, or things, was controlled for, only dealing with others ( $r = .82$ ,  $p < .001$ ) and autonomy ( $r = .30$ ,  $p < .01$ ) were significant. Therefore, it seems we can discount job similarity as a cause of overestimation.

## Discussion

The purpose of this study was to examine the FCE in a previously unexamined arena: job characteristics ratings. We hypothesized that the observers' own job characteristics, personality, own job satisfaction, and incumbent job satisfaction would influence ORICs as rated after listening to the incumbents' job descriptions. We found evidence for projection in the form of the false consensus; the most effective predictor was observers' own job characteristics, thus indicating the tendency in the FCE to assume that others are "similar to me" (Alicke & Laro, 1995).

Most studies of job characteristics involve incumbents and supervisors or affiliated peers as participants, whereas our incumbents and observers were not affiliated (Spector & Jex, 1991), as well as non-experts. When correlated with self-ratings of the incumbents, observer ratings should provide a rather accurate rating of the job characteristics of the incumbent. This was not exactly the case in this study.

Sanchez *et al.* (1997) claimed that although agreement between sources (information from incumbents as well as from supervisors, peers, non-affiliated observers, etc.) may create *perceptions* of validity for users of job information, between-source disagreement might enhance understanding of the *actual* job. In this study, incumbents' self-ratings

**Table 4. Results of multiple regression analysis regressing personality dimensions on the observer ratings of incumbent job characteristics**

	<i>B</i>	<i>SE</i>	Standardized coefficients		Significance	Correlations		
			$\beta$	<i>t</i>		Zero order	Partial	Part
<i>Dependent variable: skill variety</i>								
Agreeableness	-.22	.26	-.10	-.82	.42	-.20	-.09	-.08
Extraversion	-.02	.16	-.02	-.15	.89	-.06	-.02	-.01
Conscientiousness	-.28	.17	-.19	-1.66	.10	-.25	-.17	-.17
Emotional stability	-.24	.16	-.17	-1.49	.14	-.23	-.15	-.15
Openness to experience	.20	.23	.10	.88	.38	-.03	.09	-.09
<i>Dependent variable: feedback</i>								
Agreeableness	-.06	.23	-.03	-.28	.78	.01	-.03	-.03
Extraversion	.01	.14	.01	.08	.94	.06	.01	.01
Conscientiousness	-.02	.15	-.02	-.16	.88	-.001	-.02	-.02
Emotional stability	-.60	.14	-.05	-.42	.68	-.01	-.04	-.04
Openness to experience	.30	.20	.18	1.51	.14	.15	.16	.16
<i>Dependent variable: task identity</i>								
Agreeableness	.62	.28	.26	2.19	.03	.19	.22	.22
Extraversion	-.28	.17	-.19	-1.64	.10	-.03	-.17	-.16
Conscientiousness	-.39	.18	-.24	-2.18	.03	-.09	-.22	-.22
Emotional stability	.12	.18	.07	.66	.51	.08	.07	.27
Openness to experience	.35	.25	.16	1.41	.16	.14	.15	.14
<i>Dependent variable: autonomy</i>								
Agreeableness	-.12	.24	-.01	-.05	.96	-.04	-.01	-.005
Extraversion	-.20	.15	-.02	-.14	.89	-.03	-.01	-.014
Conscientiousness	-.67	.15	-.05	-.44	.66	-.06	-.05	-.05
Emotional stability	-.33	.15	-.03	-.22	.83	-.05	-.02	-.02
Openness to experience	-.01	.21	-.001	-.01	.99	-.03	.000	.000
<i>Dependent variable: task significance</i>								
Agreeableness	-.14	.30	-.06	-.48	.63	-.01	-.05	-.05
Extraversion	.10	.18	.07	.56	.58	.07	.06	.06
Conscientiousness	.09	.19	.06	.47	.64	.04	.05	.05
Emotional stability	-.06	.18	-.04	-.34	.73	-.01	-.04	-.04
Openness to experience	.14	.26	.07	.54	.59	.07	.06	.06
<i>Dependent variable: dealing with others</i>								
Agreeableness	-.09	.28	-.12	-1.03	.31	-.09	-.11	-.10
Extraversion	.40	.17	.27	2.41	.02	.15	.24	.24
Conscientiousness	.15	.18	.10	.86	.39	-.001	.09	.08
Emotional stability	-.15	.17	-.10	-.91	.37	-.07	-.09	-.09
Openness to experience	-.32	.24	-.15	-1.32	.19	-.08	-.13	-.13

and observer ratings significantly correlated for five of the six job characteristics (task significance, task identity, skill variety, feedback, and autonomy), indicating some agreement on ratings of job characteristics.

However, the characteristics not demonstrating agreement are most relevant to this study. The job characteristics

showing the lowest correlations, indicative of lower incumbent–observer agreement, were autonomy and dealing with others. A valid source for this disagreement, as seen from our results, may be observer projection of own job characteristics' ratings (i.e. demonstrating support for Hypothesis 2). When observers' self-rating of dealing with



**Table 5. Regression of observer ratings of incumbent job characteristic on observer personality dimensions, observer self-rated job characteristics, observer self-rated job satisfaction, and incumbent self-rated satisfaction**

Model	<i>R</i>	<i>R</i> <sup>2</sup>	Adjusted <i>R</i> <sup>2</sup>	$\beta$	SE of the estimate	Change statistics				
						<i>R</i> <sup>2</sup> change	<i>F</i> change	df1	df2	Significance <i>F</i> change
<i>Dependent variable: skill variety</i>										
1 <sup>a</sup>	.32	.10	.05		1.21	.10	2.04	5	91	.08
2 <sup>b</sup>	.36	.13	.07	.17	1.19	.03	2.79	1	90	.10
3 <sup>c</sup>	.425	.18	.11	-.27	1.17	.05	5.22	1	89	.03
4 <sup>d</sup>	.43	.19	.11	.10	1.17	.01	.93	1	88	.34
<i>Dependent variable: feedback</i>										
1	.17	.03	-.03		1.06	.03	.53	5	91	.75
2	.18	.03	-.03	-.05	1.07	.002	.20	1	90	.65
3	.35	.13	.06	.11	1.02	.09	9.56	1	89	.003
4	.49	.24	.17	.18	.96	.11	12.75	1	88	.001
<i>Dependent variable: task identity</i>										
1	.32	.11	.06		1.29	.11	2.13	5	91	.07
2	.33	.11	.05	-.03	1.30	.001	.11	1	90	.74
3	.35	.12	.05	.13	1.30	.01	1.35	1	89	.25
4	.44	.19	.12	.29	1.25	.07	7.86	1	88	.01
<i>Dependent variable: autonomy</i>										
1	.07	.005	-.05		1.11	.005	.10	5	91	.99
2	.30	.09	.03	.30	1.07	.09	8.39	1	90	.005
3	.31	.10	.02	-.08	1.07	.005	.49	1	89	.49
4	.34	.12	.04	.16	1.07	.02	2.22	1	88	.14
<i>Dependent variable: task significance</i>										
1	.11	.01	-.04		1.36	.01	.22	5	91	.95
2	.11	.01	-.05	.02	1.37	.00	.02	1	90	.89
3	.16	.02	-.05	-.12	1.37	.01	1.06	1	89	.31
4	.39	.15	.07	.38	1.28	.12	12.86	1	88	.001
<i>Dependent variable: dealing with others</i>										
1	.27	.07	.02		1.30	.07	1.45	5	91	.21
2	.85	.72	.70	.82	.72	.65	217.53	1	95	.000
3	.85	.72	.70	.05	.72	.002	.59	1	94	.41
4	.85	.72	.70	.07	.72	.003	1.16	1	93	.28

<sup>a</sup>Model 1: personality dimensions.

<sup>b</sup>Model 2: personality dimensions, observer self-rating of job characteristics (as defined by the dependent variable).

<sup>c</sup>Model 3: personality dimensions, observer self-ratings of job characteristics, observer self-rated job satisfaction.

<sup>d</sup>Model 4: personality dimensions, observer self-ratings of job characteristics, observer self-rated job satisfaction, incumbent self-rated job satisfaction.

others was regressed on ORIC for dealing with others, 72% of the variance in the ORIC for dealing with others was accounted for by observers' self-rating on the same dimension. Furthermore, the results indicated that the addition of observer self-rating of dealing with others contributed 65% of the explained variance over and above the influence of rater personality.

With respect to autonomy, observers' self-rating of autonomy accounted for 9% of the variance in the ORIC for autonomy. In addition, observer self-rating contributed 9% of the variance to the ORIC autonomy above the influence of rater personality dimensions.

Other job characteristics showed vulnerability to projection as well. In particular, incumbent job satisfaction

influenced the ratings of task significance, task identity, and feedback. As previously stated, incumbent satisfaction has been demonstrated to affect incumbent self-reports, and incumbent satisfaction influences the perception of job characteristics (James & Tetrick, 1986). Accordingly, observers may have inferred higher levels of incumbent job characteristics because of the positive affect perceived in the self-reported job description of the incumbents.

Observers' own satisfaction was also a significant predictor of their ORICs for feedback. This is in line with previous studies (DeNisi *et al.*, 1984; Smither *et al.*, 1989). Perceptions of job characteristics are influenced by job satisfaction, and job satisfaction influences the perception of job characteristics (Tetrick & James, 1986). Observers who reported higher satisfaction in their own jobs were more likely to rate incumbents as higher on feedback. This provides some support for the salience of feedback in relation to job satisfaction. In contrast, the negative relationship between observer satisfaction and skill variety seems contradictory and may have been a spurious finding.

The weak relationship between observer personality and ORICs is not entirely surprising. As previously stated, no particular personal characteristic or type of judgment is immune to projection (Clement & Krueger, 2002). Although there was some evidence of projection with the job characteristics dealing with others and task identity, there does not seem to be a clear explanation of why agreeableness and conscientiousness influenced perceptions of incumbents' task identity. It may be an issue of a mismatch between the specificity of the predictor and the criteria; the Big Five are considered more "global" personality traits. With a more specific personality measure, such as positive affectivity, we may be able to find more evidence of projection because of rater personality.

### *Limitations*

Limitations of this study concern its generalizability. The homogeneity of the sample makes generalization to the workplace difficult (De Jong *et al.*, 2001). Despite the fact that observers and incumbents showed high levels of job similarity, partial correlations indicated that job similarity was not a significant factor in the findings.

In addition, observers completed a self-report of their own job characteristics before listening to incumbents' job descriptions. This may have inadvertently primed observers to call into attention their own job characteristics when rating the characteristics of the incumbent. However, partial correlations indicate that case information alone (i.e. job characteristic information gleaned from incumbents' job descriptions) did not dictate observers' ratings (Alicke & Largo, 1995). It seems that the raters attributed their own (self-perceived) characteristics to the other person (cf. Bosveld, Koomen, Van der Pligt, & Plaisier, 1995).

Finally, some have asked why it is important for external observers to have job information of incumbents. External observers are often used in 360-degree feedback and this is increasingly used in organizations as a method for evaluating potential areas for training and development. It is important that training and development recommendations are based on job information that is free from bias.

### *Implications for Future Research*

The degree of correlation present between observers' self-ratings and ORICs for two of the six job characteristics, and to an especially high degree for dealing with others, offers some support for projection as a valid explanation for these findings. The findings in this study support the conclusion that even supposedly objective sources of information (i.e. non-incumbent, non-affiliated observers) can introduce biases into the ratings of job characteristics. Job redesign, a common organization-level intervention, employs job characteristics information. This intervention can increase job commitment (Schaufeli & Enzmann, 1998), specifically with new employees. Despite the fact that generalization to the entire working population is problematic, the results may be generalizable to entry-level positions for new employees as a gauge of social comparison (Festinger, 1954).

The theory of social comparison states that when information is ambiguous and judgments are uncertain, people are motivated to communicate with each other, and through this, develop socially derived interpretations of their meanings. Further, Festinger suggested that people evaluate information sources in terms of personal relevance and use others who are similar as comparisons. Salancik and Pfeffer (1978) suggested that, in a work setting, a new employee in an entry-level position would rely on fellow employees for information, including impressions of the job (e.g. job characteristics). If job characteristics are ambiguous, a new employee may rely largely on similar others for perceptions (Salancik & Pfeffer, 1978).

With this theory in mind, a plausible further investigation of this study could be with entry-level employees in organizations. These employees may be prone to projection in the form of the FCE because of normative influence. Knowledge of others' evaluations, especially evaluations from similar others, gives the worker some idea of how to respond to environmental cues. In addition, new employees may seek to fit in with similar others, if only verbally, and repeated verbal agreements may convince the employee that he or she has the same interpretation of the job (Salancik & Pfeffer, 1978).

Furthermore, a question that merits further investigation is why dealing with others and autonomy ratings demonstrated lower agreement compared with the other job characteristic. As with most studies, it is difficult to

draw conclusions firmly from one initial study. The results should be cross-validated and replicated.

Ratings of job characteristics for the purpose of job redesign should be tempered with the knowledge that all ratings are subject to human bias. Therefore, an incumbent interview may help expand on information from self-report. In addition, information that is more objective, such as job analyses conducted by subject matter experts, can supplement these sources of job information. In addition, if non-expert observers (i.e. managers and supervisors) are to be used for redesign, they should undergo error training, such as is done in performance appraisal training. This may help them to be aware of the FCE in order to prevent it from interfering with their ratings. Training raters to recognize and avoid rating errors without specifying "incorrect" rating distributions can be an effective training approach (Woehr & Huffcutt, 1994).

Job characteristics ratings continue to be a factor in job redesign as an organizational-level motivational tool. The FCE is a possible source of bias in job information from both incumbents and from observer ratings.

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